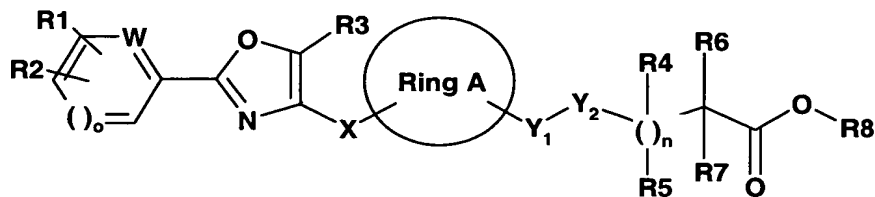


WHAT IS CLAIMED IS:

1. A compound having the formula I:



5

in which:

Ring A is a (C₃-C₈)-cycloalkanediyl ring or a (C₃-C₈)-cycloalkenediyl ring, wherein one or more carbon atoms of the (C₃-C₈)-cycloalkanediyl ring or the (C₃-C₈)-cycloalkenediyl ring may be replaced by oxygen atoms;

10

R1 and R2 are:

- (a) Independently of one another H, F, Cl, Br, CF₃, OCF₃, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl, SCF₃, SF₅, OCF₂-CHF₂, (C₆-C₁₀)-aryl, (C₆-C₁₀)-aryloxy, OH, NO₂; or
- (b) together with the phenyl, pyridine, 1H-pyrrole, thiophene or furan ring form fused, partially or unsaturated bicyclic (C₆-C₁₀)-aryl, (C₅-C₁₁)-heteroaryl;

15

20

R3 is:

H, (C₁-C₆)-alkyl, (C₃-C₈)-cycloalkyl, (C₁-C₃)-alkyl-(C₃-C₈)-cycloalkyl, phenyl, (C₁-C₃)-alkyl-phenyl, (C₅-C₆)-heteroaryl, (C₁-C₃)-alkyl-(C₅-C₆)-heteroaryl, or (C₁-C₃)-alkyl fully or partially substituted by F;

25

W is:

- (a) is CH or N if o = 1, or
- (b) is O, S or NR₁₀ if o = 0;

30

X is (C₁-C₆)-alkanediyl, wherein one or more carbon atoms of the (C₁-C₆)-alkanediyl may be replaced by oxygen atoms;

Y1 is (CR₁₃R₁₄)_p, wherein p is 1 or 2;

Y2 is CH₂, O, S, SO, SO₂ or NR₉;

n is 0-2;

5

R₄ is H, (C₁-C₆)-alkyl; F if Y₂ is not O; NR₉;

R₅ is H, (C₁-C₆)-alkyl; F if Y₂ is not O; NR₉;

10 R₆ is H, (C₁-C₆)-alkyl; or F if n is not 0;

R₇ is:

15 H, F (if n is not 0), (C₁-C₆)-alkoxy, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₃-C₈)-cycloalkyl, (C₁-C₆)-alkyl that may be unsubstituted or substituted by one or more radicals selected from the group consisting of:
hydroxyl, phenyl, (C₅-C₁₁)-heteroaryl, (C₁-C₆)-alkoxy and NR₁₁R₁₂, or
phenyl that may be unsubstituted or substituted by one or more
20 radicals from the group consisting of hydroxy, (C₁-C₆)-alkoxy, F and CF₃,

with the proviso that R₇ is not NR₁₁R₁₂ or (C₁-C₆)-alkoxy if R₆ = F;

25 R₆ and R₇ are together with the carbon atom that carries them (C₃-C₈)-cycloalkyl;

R₈ is H or (C₁-C₆)-alkyl;

R₉ is:

30 H, (C₁-C₆)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, aryl-(C₁-C₄)-alkyl, CO-(C₁-C₆)-alkyl, CO-(C₆-C₁₀)-aryl, CO-(C₁-C₆)-alkyl-(C₆-C₁₀)-aryl, CO-(C₅-C₁₁)-heteroaryl, C(O)-O-(C₁-C₆)-alkyl, C(O)-O-(C₁-C₆)-alkyl-(C₆-C₁₀)-aryl, C(O)-O-(C₆-C₁₀)-aryl, C(O)-O-(C₅-C₁₁)-heteroaryl, SO₂-(C₁-C₆)-alkyl, SO₂-(C₁-C₆)-alkyl-(C₆-C₁₀)-aryl, SO₂-(C₁-C₆)-alkyl-SO₂-(C₁-C₆)-alkyl, SO₂-(C₆-C₁₀)-aryl, SO₂-(C₅-C₁₁)-heteroaryl, wherein aryl or heteroaryl, or both may be
35 unsubstituted or substituted by (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl, F, Cl, CO-(C₁-C₆)-alkyl;

R10 is H, (C₁-C₆)-alkyl or (C₁-C₆)-alkyl-phenyl;

R11 is H, (C₁-C₆)-alkyl or (C₁-C₆)-alkyl-phenyl;

5

R12 is H, (C₁-C₆)-alkyl or (C₁-C₆)-alkyl-phenyl;

R13 is H or (C₁-C₆)-alkyl; and

10 R14 is H or (C₁-C₆)-alkyl; or

a physiologically acceptable salt of the compound;

a solvate of the compound; or

a physiologically active derivative of the compound.

15

2. The compound of claim 1 in which

Ring A is (C₃-C₈)-cycloalkanediyl or (C₃-C₈)-cycloalkenediyl, wherein one carbon atom of the (C₃-C₈)-cycloalkanediyl ring or the (C₃-C₈)

20 cycloalkenediyl ring may be replaced by an oxygen atom; and

X is (C₁-C₆)-alkanediyl, wherein the C₁ or C₂ carbon atom (to Ring A) may be replaced by an oxygen atom.

25 3. The compound of Claim 1, in which

Ring A is cis-cyclohexane-1,3-diyl;

R1 and R2 are:

independently of one another H, F, CF₃, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl, or
30 phenyl; or

together with a phenyl ring of the compound form a naphthyl;

R3 is (C₁-C₆)-alkyl, (C₃-C₈)-cycloalkyl, or phenyl;

W is:

CH if o = 1, or

35 O or S if o = 0;

X is CH₂-O or CH₂-O-CH₂;

Y1 is CH₂;

Y2 is CH₂, O, S, SO, SO₂ or NR₉;

n is 0;

5 R4 is H;

R5 is H;

R6 is H, (C₁-C₆)-alkyl, or benzyl;

R7 is H, (C₁-C₆)-alkyl, (C₃-C₆)-cycloalkyl, phenyl, or benzyl,

10 R6 and R7 together with the carbon atom that carries them are (C₃-C₆)-cycloalkyl;

R8 is H; and

R9 is:

H, or

(C₁-C₆)-alkyl, which may be unsubstituted or substituted by:

15 (C₃-C₆)-cycloalkyl, phenyl, (C₅-C₆)-heteroaryl; CO-(C₁-C₆)-alkyl, CO-(C₁-C₆)-alkyl-phenyl, CO-phenyl, C(O)-O-(C₁-C₆)-alkyl, CO-NH-phenyl, SO₂-(C₁-C₄)-alkyl, SO₂-(C₁-C₄)-alkyl-SO₂-(C₁-C₄)-alkyl, SO₂-tolyl, or a combination thereof,

20 wherein the phenyl of the substituent for its part may be substituted by O-(C₁-C₃)-alkyl;

a physiologically acceptable salt of the compound;

a solvate of the compound; or

a physiologically acceptable derivative of the compound.

25

4. A pharmaceutical composition comprising the compound of Claim 1 and a pharmaceutically acceptable carrier.

30 5. The pharmaceutical composition of Claim 4, further comprising an active compound for treating and/or preventing a metabolic disorder or a disease associated with the metabolic disorder.

6. The pharmaceutical composition of Claim 4, further comprising an antidiabetic.
7. The pharmaceutical composition of Claim 4, further comprising a lipid modulator.
8. A method for treating and/or preventing a disorder of fatty acid metabolism or glucose utilization in a patient, comprising administering a therapeutically effective amount of the compound of Claim 1 to the patient.
9. A method for treating and/or preventing a disorder involving insulin resistance in a patient, comprising administering a therapeutically effective amount of the compound of Claim 1 to the patient.
10. A method for treating and/or preventing diabetes mellitus and its sequelae in a patient, comprising administering a therapeutically effective amount of the compound of Claim 1 to the patient.
11. A method for treating and/or preventing dyslipidemias and their sequelae in a patient, comprising administering a therapeutically effective amount of the compound of Claim 1 to the patient.
12. A method for treating and/or preventing a physiological state associated with a metabolic syndrome in a patient, comprising administering a therapeutically effective amount of the compound of Claim 1 to the patient.
13. The method of Claim 8, further comprising administering the patient a therapeutically effective amount of a second active compound for treating and/or preventing disorders of the fatty acid metabolism and glucose utilization disorders.
14. The method of Claim 9, further comprising administering to the patient a therapeutically effective amount of a second compound for treating and/or preventing a disorder in which insulin resistance is involved.
15. A process for preparing a pharmaceutical composition of Claim 4, comprising the steps of:
 - (a) mixing the compound with the pharmaceutically acceptable carrier to

form a mixture; and

(b) placing the mixture into a form that is suitable for administration.

5 16. The compound of Claim 2, in which

Ring A is cis-cyclohexane-1,3-diyl;

R1 and R2 are:

10 independently of one another H, F, CF₃, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl, or phenyl; or

together with a phenyl ring of the compound form a naphthyl;

R3 is (C₁-C₆)-alkyl, (C₃-C₈)-cycloalkyl, or phenyl;

W is:

CH if o = 1, or

15 O or S if o = 0;

X is CH₂-O or CH₂-O-CH₂;

Y1 is CH₂;

Y2 is CH₂, O, S, SO, SO₂ or NR₉;

n is 0;

20 R4 is H;

R5 is H;

R6 is H, (C₁-C₆)-alkyl, or benzyl;

R7 is H, (C₁-C₆)-alkyl, (C₃-C₆)-cycloalkyl, phenyl, or benzyl,

25 R6 and R7 together with the carbon atom that carries them are (C₃-C₆)-cycloalkyl;

R8 is H; and

R9 is:

H, or

(C₁-C₆)-alkyl, which may be unsubstituted or substituted by:

30 (C₃-C₆)-cycloalkyl, phenyl, (C₅-C₆)-heteroaryl; CO-(C₁-C₆)-alkyl, CO-(C₁-C₆)-alkyl-phenyl, CO-phenyl, C(O)-O-(C₁-C₆)-alkyl, CO-NH-phenyl, SO₂-(C₁-C₄)-alkyl, SO₂-(C₁-C₄)-alkyl-

SO₂-(C₁-C₄)-alkyl, SO₂-tolyl, or a combination thereof,
wherein the phenyl of the substituent for its part may be
substituted by O-(C₁-C₃)-alkyl;

- 5 a physiologically acceptable salt of the compound;
a solvate of the compound; or
a physiologically acceptable derivative of the compound.

10 17. A method for treating and/or preventing a disorder of fatty acid
metabolism or glucose utilization in a patient, comprising administering a
therapeutically effective amount of the compound of Claim 2 to the patient.

15 18. A method for treating and/or preventing a disorder involving insulin
resistance in a patient, comprising administering a therapeutically effective
amount of the compound of Claim 2 to the patient.

20 19. A method for treating and/or preventing diabetes mellitus and its
sequelae in a patient, comprising administering a therapeutically effective
amount of the compound of Claim 2 to the patient.

20. A method for treating and/or preventing dyslipidemias and their
sequelae in a patient, comprising administering a therapeutically effective
amount of the compound of Claim 2 to the patient.

25 21. A method for treating and/or preventing a physiological state
associated with a metabolic syndrome in a patient, comprising
administering a therapeutically effective amount of the compound of Claim
2 to the patient.

30 22. The method of Claim 17, further comprising administering the patient
a therapeutically effective amount of a second active compound for treating
and/or preventing disorders of the fatty acid metabolism and glucose
utilization disorders.

35 23. The method of Claim 18, further comprising administering to the
patient a therapeutically effective amount of a second compound for

treating and/or preventing a disorder in which insulin resistance is involved.

24. A pharmaceutical composition comprising the compound of Claim 2 and a pharmaceutically acceptable carrier.

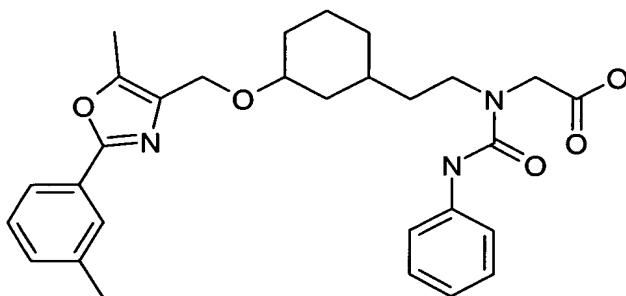
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25. A pharmaceutical composition comprising the compound of Claim 3 and a pharmaceutically acceptable carrier.

26. A pharmaceutical composition comprising the compound of Claim 16 and a pharmaceutically acceptable carrier.

10

15



cis/racemate

C₂₉H₃₅N₂O₅ (505.6), MS(ESI): 506 (M+H)

- 5 The present invention is not to be limited in scope by the specific
embodiments described herein. Indeed, various modifications of the
invention in addition to those described herein will become apparent to
those skilled in the art from the foregoing description and the
accompanying figures. Such modifications are intended to fall within the
10 scope of the appended claims.

Various publications are cited herein, the disclosures of which are
incorporated by reference in their entireties.